UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF SOLID AND HAZARDOUS WASTE

OVERSIGHT OF COMMERCIAL HAZARDOUS WASTE MANAGEMENT FACILITIES

GUIDANCE

September 2004

OVERSIGHT PROGRAM
FOR
COMMERCIAL HAZARDOUS WASTE TREATMENT AND DISPOSAL FACILITIES

Introduction

The Utah State Legislature has provided for the safe management of solid and hazardous wastes through the enactment of the Utah Solid and Hazardous Waste Act and other related legislation. The purpose of these environmental statutes is to ensure that management of solid and hazardous wastes in Utah is conducted in a manner protective of human health and the environment.

The Legislature and Governor's Office have directed the Utah Department of Environmental Quality, Division of Solid and Hazardous Waste, to develop and implement a regulatory program to oversight the commercial waste management businesses in Utah that is consistent with the intent of statutes and policies and that appropriately balances regulatory compliance and economic considerations.

Purpose

The purpose of this document is to set forth the operating principles for regulatory oversight of the commercial hazardous waste treatment, storage and disposal facilities in Utah. This document describes the following elements of the Division's oversight program:

Inspections

Inspection checklists and reports

Split sample collection and analysis

Applicability

The regulatory oversight program described in this document applies to Clean Harbors Aragonite LLC, a commercial hazardous waste treatment and storage facility, Clean Harbors Grassy Mountain LLC, a commercial hazardous waste treatment, storage and disposal facility, and Envirocare of Utah Inc., a commercial mixed waste treatment, storage and disposal facility. These facilities are hereinafter referred to as "commercial facilities."

Inspection Program

The purpose of the inspection program is to ensure that, over the course of a year, the compliance status of the commercial facilities is evaluated. This evaluation will be accomplished through the inspection process outlined below.

Division inspectors perform a wide variety of inspections at the commercial facilities, including the following:

Comprehensive Groundwater Monitoring Evaluations (CME)

These inspections are conducted at facilities that have land disposal units that require groundwater monitoring. CME inspections are therefore only required at Envirocare and Grassy Mountain. The CME is to determine if the groundwater monitoring systems are designed and function properly. The scope of a CME consists of the inspection elements of a Continuous Oversight Inspection and also includes collection of groundwater samples and a technical analysis of the facility's groundwater monitoring system and hydrogeological conditions.

An initial CME has been conducted at Envirocare and Grassy Mountain. Subsequent CMEs may be conducted if there has been a significant change in hydrogeological conditions or the groundwater monitoring system since the initial CME. A CME is not needed if the facility has not installed new groundwater monitoring wells since the initial or most recent CME, no contamination has been detected in the monitoring wells, or no changes in the direction of groundwater flow have occurred. An inspection report is prepared for each CME.

Operation and Maintenance Inspections (O&M)

These inspections are conducted at facilities that have land disposal units that require groundwater monitoring. O&M inspections are therefore only required at Envirocare and Grassy Mountain. An O&M inspection is to determine the continued adequacy of the operation and maintenance of groundwater monitoring systems. Once the initial CME has been completed, an O&M inspection will be conducted every year thereafter, unless changes to the systems dictate additional CMEs. An inspection report is prepared for each O&M inspection.

Compliance Sampling Inspections (CSI)

These are inspections in which samples are collected for laboratory analysis for purposes other than CMEs. This type of an inspection will include sampling of waste to verify the facility’s treatment ability or incoming waste handling procedures as described in the Split Sampling of Waste Section. An inspection report is prepared for each CSI.

Continuous Oversight Inspections (COI)

These inspections differ from CMEs, CSIs and O&M inspections in that they are routine inspections of the commercial facilities to evaluate compliance with the requirements of Utah's Administrative Code and State-issued hazardous waste permits. The COIs normally focus on one or more specific requirements of the facilities' permits or the rules and are conducted on a weekly basis (on the average).

Depending on the type and scope of the inspection, the inspectors may observe, review or evaluate any of the following: operating record documentation, incoming waste handling procedures, waste tracking, waste analysis procedures and results, tanks, storage areas, waste treatment process and areas, landfills, surface impoundments, personnel training records, preparedness and prevention measures, contingency plan response, groundwater monitoring systems, waste generation and management activities, incinerator operations, pollution control equipment (e.g., bag houses, precipitators, scrubbers, carbon injection units, etc.), fugitive emission control devices, and waste-processing operations (e.g., decanting, shredding, repacking,).

At the end of each quarter, Division inspectors compile COI inspection summaries into one inspection report. This report includes any self-reported non-compliance notifications made by the facility. The summaries follow the general inspection report format found in Attachment 3 to this document.

These reports are used to support any enforcement action that is taken.

Permit-required construction certification inspections (CCI)

These are specialized inspections of permitted construction such as landfill cells, new process equipment, and other permit construction activities. CCIs are only conducted as needed. An inspection report is prepared for each CCI.

CERCLA Off-Site Rule Inspections

These inspections are conducted by the Environmental Protection Agency (EPA) to determine if the commercial facilities are in compliance with the CERCLA Off-site Rule. These inspections usually are conducted once per year. Division inspectors accompany EPA on these inspections.

Notification of Inspections

Division inspectors, along with the Section Manager, determine whether any inspection should be announced to the facility or not. Announced inspections are

typically those that involve EPA and those that require certain facility personnel to be on-site. Most inspections are unannounced inspections.

Inspection Checklists

To ensure that each commercial facility's compliance with all applicable permit conditions and hazardous waste management rules is evaluated, Division inspectors use inspection checklists.

Priority is given to those areas of the facility that have had problems or that, in the judgment of the inspector, deserve more attention. If substantial effort is dedicated to certain aspects of the facility's compliance, there may be areas that aren't evaluated during a fiscal year. If this happens, those areas will be given a high priority for the next fiscal year.

A copy of the checklist is included in the annual inspection report with a small narrative, as needed, indicating what was observed during the inspection. The checklist is modified as necessary to keep current with the permit. The type of checklist used may be modified as new ideas or better ways are discovered. Attachment 1 to this document is an example of a facility checklist.

Split Sampling of Groundwater

The purpose of split sampling of groundwater is to confirm that the laboratories analyzing the commercial facilities' samples are providing accurate data. The two commercial facilities that operate and maintain groundwater-monitoring systems are Clean Harbors Grassy Mountain and Envirocare of Utah.

Grassy Mountain

The Grassy Mountain facility has 80 monitoring wells. These wells are located up and down gradient of the RCRA landfill cells and TSCA landfill cells. The wells are sampled twice per year by the facility. The samples are sent to an off-site laboratory for analysis. The facility is also required to take duplicate samples of 10% (rounded up) of the wells sampled. Duplicates are collected to help verify that the laboratory is accurately reporting the results. Split groundwater samples will be collected at the Grassy Mountain facility as follows:

All of the wells that show unresolved contamination will be split sampled at least once per year;

One of the up gradient wells will be split sampled once every three years;

Two down-gradient wells, selected randomly, will be split sampled once per year.

If, for any compound, the analytical results from a split sample versus the facility-analyzed sample show a positive percent change of more than 30% (based on the smaller value as the base value) between the two samples, an investigation will be initiated in order to identify any shortcomings in sample collection, sample analysis, or reporting.

All split samples are analyzed for the same parameters as the facility's samples. If the state health lab cannot meet this requirement, the Division's split samples will be sent to a state-certified commercial lab that has the ability to analyze all parameters.

Envirocare

Envirocare of Utah has 17 monitoring wells for the Mixed Waste Landfill Cell (MWLC). Envirocare samples these wells twice per year. The facility is required to take duplicate samples of 10% (rounded up) of the wells sampled. Duplicates are collected to help verify that the laboratory is accurately reporting the results. Split samples will be collected at Envirocare as follows:

All of the wells that show unresolved contamination will be split sampled at least once per year;

One of the up gradient wells will be split sampled once every three years;

Two down-gradient wells, selected randomly, will be split sampled once per year.

If, for any compound, the analytical results from a split sample versus the facility-analyzed sample show a positive percent change of more than 30% (based on the smaller value as the base value) between the two samples, an investigation will be initiated in order to identify any shortcomings in sample collection, sample analysis, or reporting.

The split samples will be analyzed for the same parameters as the facility's samples. If the state health lab cannot meet this requirement, the Division's split samples will be sent to a commercial lab that has the ability to analyze all parameters.

Split Sampling of Waste

The purpose of split sampling of waste is to confirm that the laboratories analyzing the commercial facilities' samples are providing accurate data. Split waste samples will be collected from the three commercial facilities as follows:

Grassy Mountain

Grassy Mountain treats waste in tanks and receives already treated waste from off-site sources for disposal. At a minimum, two random samples will be collected annually by Division inspectors to verify the accuracy of the laboratory conducting the analysis of the treated waste.

The split samples will be analyzed for the same parameters as the facility's samples. If the state health lab cannot meet this requirement, the split samples will be sent to a state-certified commercial lab that has the ability to analyze all parameters.

Aragonite incinerator

Aragonite treats waste by incineration. Residues from the incineration system include slag, spray dryer dust and baghouse dust. At a minimum, two random samples of these wastes will be split sampled annually by Division inspectors.

Aragonite also samples and analyzes incoming waste to determine storage and incineration parameters to facilitate proper management of the waste. At a minimum, two randomly selected incoming waste streams will be split sampled annually.

The split samples will be analyzed for the same parameters as the facility's samples. If the state health lab cannot meet this requirement, the split samples will be sent to a state-certified commercial lab that has the ability to analyze all parameters.

Envirocare

Envirocare treats wastes in tanks, by vacuum thermal desorption, and by in-cell macroencapsulation. Envirocare also receives treated waste from off-site sources for disposal. At a minimum, two samples will be split sampled annually.

The split samples will be analyzed for the same parameters as the facility's samples. If the state health lab cannot meet this requirement, the split samples will be sent to a state-certified commercial lab that has the ability to analyze all parameters.

The split sampling of groundwater and waste is in addition to the Division's ongoing oversight of the commercial facilities, which includes continuous oversight inspections with focus on sampling programs, observation/evaluation of specific field sampling events, chain-of-custody and laboratory protocols, raw and summary data review, evaluation of statistical conclusions and reviews of waste management decisions and the associated supporting analytical data.

Inspection Reports

At the conclusion of any on-site inspection, a Notice of Inspection (NOI) (see Attachment 2) with observations/concerns is normally written and signed by the inspector and the facility contact. The original is left with the facility. The purpose of the NOI is to let the facility know in a timely manner what possible concerns were noted during the inspection. The pink copy is for the inspector's use. The yellow copy of the NOI is included in the inspection report. The blue copy is given to the Section Manager. The green copy is sent to EPA.

The inspection report format is included in this document as Attachment 3.

Solid and Hazardous Waste Control Board Concurrence

The Solid and Hazardous Waste Control Board reviewed this guidance document and, as a result of that review, unanimously concurred with its purpose, use, and content during the Board meeting of October 14, 2004.

Attachments

Attachment 1 - Example of inspection checklists
Attachment 2 - NOI form
Attachment 3 - Inspection report format

ATTACHMENT 1-
Example of inspection checklist

COMMERCIAL TREATMENT & DISPOSAL FACILITY INSPECTION CHECKLIST
UTAH DIVISION OF SOLID & HAZARDOUS WASTE

Continuous Oversight Inspection

Facility Name			EPA ID Number		
Inspection Interval	Start			End	
Facility Contacts					
DSHW Inspectors					

1. Generator Requirements

PARAMETER DESCRIPTION	DATES
Labels, dates,< 90 days	
Leaking containers, tarps, containers closed	
Land disposal restriction requirements	
Manifests for off-site shipments	

2. Waste Receiving and Analysis

PARAMETER DESCRIPTION	DATES
Waste characterization	
Waste profiles	
Incoming load manifests	
Waste sampling	
Waste analysis, methods	
Treatment Processes	
Analysis of Treated Waste	
Fingerprint analysis	
Laboratory QA/QC	

3. Security

PARAMETER DESCRIPTION	DATES
Fences, sign	
Facility lighting	
Firebreak @ fence line	

4. Inspections

PARAMETER DESCRIPTION	DATES
Inspection forms	
Correcting deficiencies	
Remedial work orders	

5. Personnel Training

PARAMETER DESCRIPTION	DATES
Training plan content	
Training records	

6. Preparedness and Prevention

PARAMETER DESCRIPTION	DATES
Communications	
Fire Response Equipment	
Spill Prevention	
Testing and Maintenance of Equipment	

7. Contingency Report

PARAMETER DESCRIPTION	DATES
Spill reporting/incident reports	
Incident reporting	

8. Closure and Post-Closure

PARAMETER DESCRIPTION	DATES
Closure of landfill cells	
Financial Assurance for Closure	
Financial Assurances for Post-Closure	
Liability Requirements	

8. Storage In Containers

PARAMETER DESCRIPTION	DATES
Receiving procedures	
Sampling	
Containment systems	
Compatibility	
Operating record	

9. Treatment and Storage in Tanks

PARAMETER DESCRIPTION	DATES
Leaks, overflows	
Containment system	
Annual certification	
Paint filter test results	

10. Surface Impoundment

PARAMETER DESCRIPTION	DATES
Adequate freeboard	
Leak detection	
Permitted waste verification	

11. Hazardous Waste Landfill Cells

PARAMETER DESCRIPTION	DATES
Liner Condition	
Run-on/run-off control	
Leachate reports	
Staged waste management	
Leak detection	

12. Groundwater Monitoring

PARAMETER DESCRIPTION	DATES
Sampling and analysis	

ATTACHMENT 2 -
NOI form

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF SOLID AND HAZARDOUS WASTE
288 NORTH 1460 WEST
SALT LAKE CITY, UTAH 84114-4880
(801) 538-6170

NOTICE OF INSPECTION

Facility Name	Facility Phone #
Facility Address	Date of Inspection

OBSERVATIONS AND CONCERNS

Note: Items listed above are preliminary findings only. The State may take enforcement action regarding any items listed above. The State is not precluded from taking enforcement action for items which may not be listed.

Inspector Signature	Date Signed	Recipient Signature	Date Signed

WHITE—facility YELLOW--file PINK--inspector BLUE--Section Chief GREEN -- EPA

ATTACHMENT 3 -
Inspection report format

The following is the format for inspection reports.

INSPECTION REPORT FOR
(Facility name)

DATE OF INSPECTION:
Self-explanatory

FACILITY ADDRESS:
Include actual facility address and not just P.O. Box

FACILITY CONTACT:
Include title and phone #

NOTIFICATION:
Generator category i.e. LQG, SQG, TSD

APPLICABLE REQUIREMENTS:
R315 or applicable permit requirements

TYPE OF INSPECTION:
COI, CME, etc.

PARTICIPANTS:
Include all DSHW participants, EPA staff, Local Health Department staff, facility personnel, etc.

WEATHER CONDITIONS:
Include temperature

TIME IN:
Self-explanatory

TIME OUT:
Self-explanatory

REPORT PREPARED BY:
Name of inspector writing the report

FACILITY DESCRIPTION:
What does the facility do, products produced, number of employees, time at present location, and other relevant information. Include a physical description of terrain in and around the facility.

CREDENTIALS, PURPOSE AND SCOPE:

Written statement that credentials were presented. For purpose and scope, explain what was told to the facility contact, document those areas you wish to cover such as; personnel training, drum storage area, manifests, checklist used, etc.

MANAGEMENT ACTIVITIES:
Describe in a narrative format the type of waste streams generated, the area where the waste is generated and the process that generated the waste. Also, explain the different management areas i.e. storage pads, treatment areas, etc.

NARRATIVE:
This section should describe what was seen and done during the inspection. It should include any relevant documentation.

COMPLIANCE STATUS:
This is a summary of the compliance issues discovered during the inspection.

ISSUES:
List issues, problems, questions, or other concerns that require, follow up, in-house discussion, or interpretation.

SIGNATURE:
Each inspection report should be signed and dated by the inspector for the COIs. Once all of the COIs are complied in to four quarterly reports, this will become the annual inspection report that EPA evaluates to determine if the report is timely. The annual report should be signed within 45-days from the end of the inspection year.